AUTOMOTIVE BATTERIES & ACCESSORIES

2015
2016

DYNAC EUROPE BATTERIES

LANDPORT EUROPE

TABLE OF CONTENTS

BATTERIES

Compact batteries ..... 4 - 5
Starter batteries ..... 6 - 7
Start-stop batteries ..... 8 - 9
Professional batteries ..... 10 - 11
Classic batteries ..... 12 - 13
Marine batteries ..... 14 - 15
Semi-traction batteries ..... 16 - 17
Deep Cycle batteries ..... 18 - 19
Gel batteries ..... 20 - 21

ACCESSORIES

Chargers & Boosters ..... 22 - 27
Accessories ..... 28 - 33
Tools ..... 34 - 35

Technical information ..... 36 - 43
Disclaimer and terms & conditions ..... 44 - 45

LAY-OUT/TERMINAL/HOLD-DOWN

Lay-out

0

1

2

3

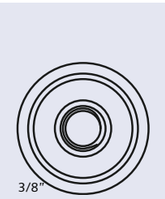
4

19

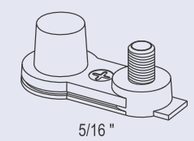
Terminal

1

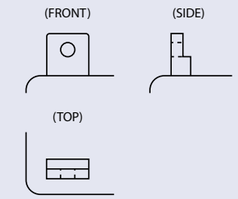
3



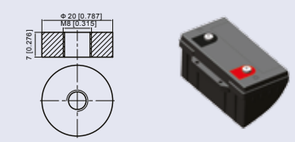
21



DUAL

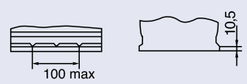


B

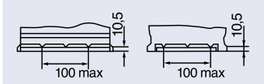


T11

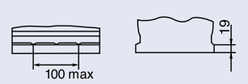
Hold-down



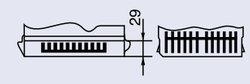
B1



B3

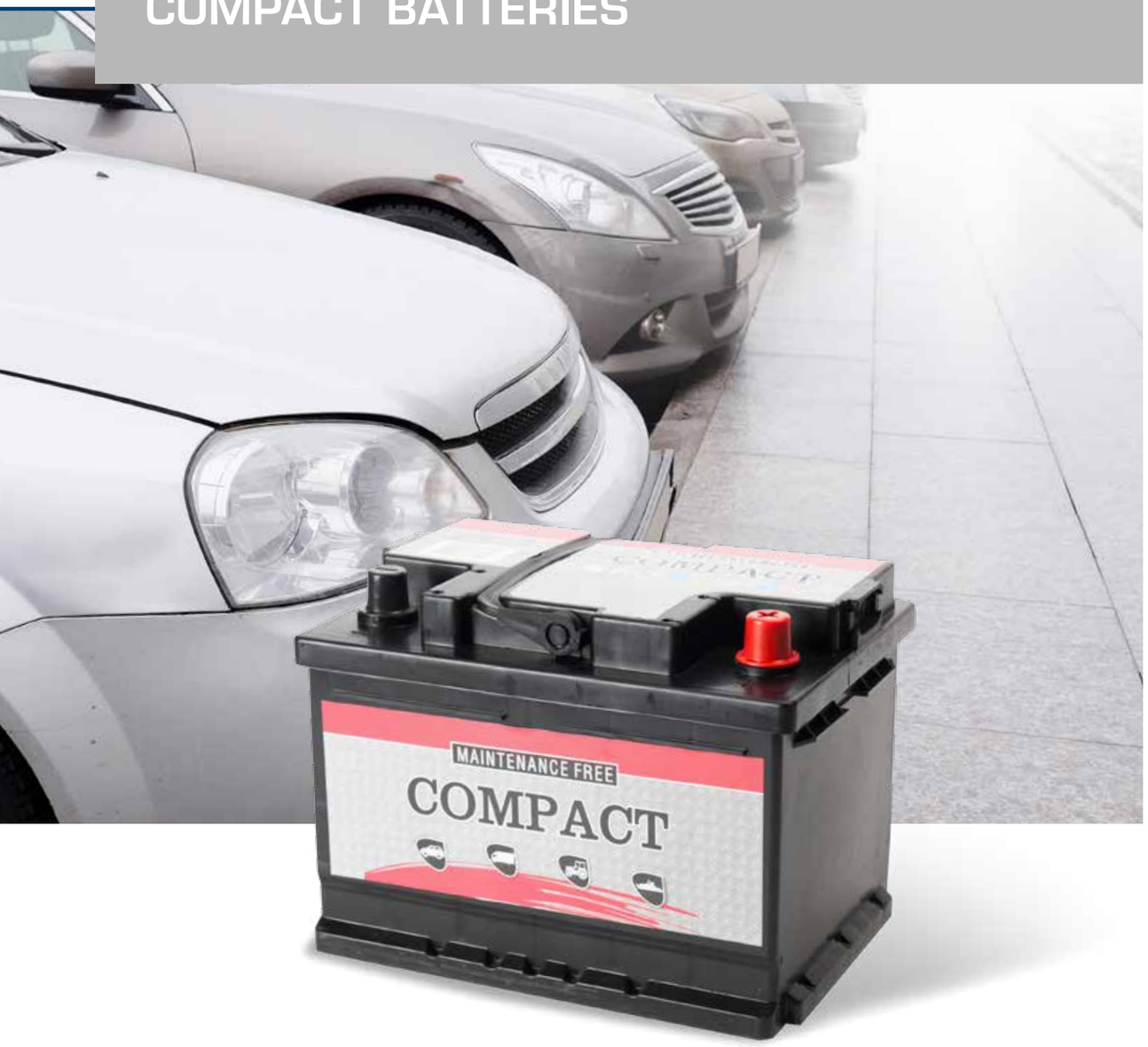


B4



B9

COMPACT BATTERIES



Article Number	Voltage (V)	Capacity (Ah/20hr)	Length (mm)	Width (mm)	Height (mm)	Total Height (mm)	CCA (EN)	Layout	Terminal	Hold-down
Compact Car										
COMP 1	12	44	211	175	175	175	360	0	1	B3
COMP 2	12	60	242	175	175	175	540	0	1	B3
COMP 3	12	74	278	175	175	175	680	0	1	B3
COMP 5	12	100	353	175	175	175	850	0	1	B3
Compact Truck										
COMP 140	12	140	513	189	195	223	760	3	1	-
COMP 180	12	180	513	223	195	223	1000	3	1	-
COMP 230	12	230	513	274	216	242	1150	3	1	-

FOR BATTERY APPLICATION LIST, PLEASE VISIT **WWW.LANDPORTBV.COM** OR **WWW.ACCUVIKS.BE**

STARTER BATTERIES

LANDPORT EUROPE

Article Number	Voltage (V)	Capacity (Ah/20hr)	Length (mm)	Width (mm)	Height (mm)	Total Height (mm)	CCA (EN)	Layout	Terminal	Hold-down
Calcium Start										
LMFV 53226	12	32	178	128	227	227	240	0	1	B1
LMFV 53520	12	35	187	127	200	220	240	0	3	-
LMFV 53522	12	35	187	127	200	220	240	1	3	-
LMFV 53587	12	35	187	127	200	220	300	0	3	B1
LMFV 53890	12	38	243	127	180	199	240	1	1	-
LMFV 54059	12	40	175	175	190	190	300	0	1	B3
LMFV 54459L	12	44	207	175	175	175	360	0	1	B3/B4
LMFV 54464	12	44	210	175	190	190	360	1	1	B3/B4
LMFV 54519	12	45	242	175	175	175	360	0	1	B3/B4
LMFV 54523	12	45	236	127	200	220	300	0	1	-
LMFV 54524	12	45	236	127	200	220	300	1	1	-
LMFV 54551	12	45	236	127	200	220	300	1	3	-
LMFV 54577	12	45	220	135	204	225	300	0	1	B1
LMFV 54579	12	45	220	135	204	225	300	1	1	B1
LMFV 54584	12	45	234	127	200	220	300	0	3	-
LMFV 55041	12	50	200	170	200	220	360	0	1	-
LMFV 55042	12	50	200	170	200	220	360	1	1	-
LMFV 55067	12	50	207	175	190	190	420	0	1	B3/B4
LMFV 55559	12	55	242	175	190	190	420	0	1	B3/B4
LMFV 55559L	12	55	242	175	175	175	420	0	1	B3/B4
LMFV 55565L	12	55	242	175	175	175	420	1	1	B3/B4
LMFV 56010	12	55	238	180	182	182	460	1	21	-
LMFV 56062	12	60	230	171	200	220	390	0	1	B1
LMFV 56063	12	60	230	171	200	220	390	1	1	B1
LMFV 56068	12	60	230	171	200	220	390	0	1	-
LMFV 56069	12	60	230	171	200	220	390	1	1	-
LMFV 56077	12	60	242	175	175	175	600	0	1	B3/B4
LMFV 56219	12	62	242	175	190	190	480	0	1	B3/B4
LMFV 56221	12	62	242	175	190	190	480	1	1	B3/B4
LMFV 56420	12	64	278	175	175	175	640	0	1	B3/B4
LMFV 57010	12	65	268	180	182	182	510	1	21	-
LMFV 57024	12	70	266	174	200	225	540	1	1	B1
LMFV 57029	12	70	266	174	200	225	540	0	1	B1
LMFV 57219L	12	72	275	175	175	175	680	1	1	B3/B4
LMFV 57412	12	74	278	175	190	190	680	0	1	B3/B4
LMFV 57412L	12	74	278	175	175	175	680	0	1	B3/B4
LMFV 58035	12	80	310	175	190	190	720	0	1	B3/B4
LMFV 58211	12	82	310	175	175	175	720	0	1	B3/B4
LMFV 58213	12	82	315	175	175	175	720	1	1	B3/B4
LMFV 58515	12	85	353	175	175	175	760	0	1	B3/B4
LMFV 58821	12	88	350	175	190	190	640	1	1	B3/B4
LMFV 58827	12	88	353	175	190	190	640	0	1	B3/B4
LMFV 60032	12	100	302	172	200	219	680	0	1	B1
LMFV 60033	12	100	302	172	200	219	680	1	1	B1
LMFV 60038	12	100	353	175	190	190	850	0	1	B3/B4
LMFV 60800	12	102	327	170	206	228	750	19	1	-
Ultra Start										
ULTRA 1	12	45	207	175	175	175	440	0	1	B3/B4
ULTRA 2	12	60	242	175	175	175	600	0	1	B3/B4
ULTRA 3	12	74	276	175	175	175	760	0	1	B3/B4
ULTRA 5	12	92	353	175	190	190	860	0	1	B3/B4

START-STOP BATTERIES

Article Number	Voltage (V)	Capacity (Ah/20hr)	Length (mm)	Width (mm)	Height (mm)	Total Height (mm)	CCA (EN)	Layout	Terminal	Hold-down
Enhanced Flooded Battery (EFB)										
EFB 560500056	12	60	242	174	190	190	560	0	1	B3
EFB 565500065	12	65	277	174	175	175	650	0	1	B3
EFB 570500065	12	70	277	174	190	190	650	0	1	B3
EFB 580500073	12	80	315	174	190	190	730	0	1	B3
EFB 610500095	12	110	398	174	190	190	950	0	1	B3
Absorbent Glass Mat (AGM)										
AGM 560901068	12	60	241	175	190	190	680	0	1	B3
AGM 570901076	12	70	278	175	190	190	760	0	1	B3
AGM 580901080	12	80	314	175	190	190	800	0	1	B3
AGM 595901085	12	95	353	175	190	190	850	0	1	B3

Start-Stop EFB

- **Suitable for modern, environmentally friendly vehicles with a more simple start-stop function.**
- **Two times longer cycle life and more resistant to deep discharging than conventional starter battery.**

Start-Stop AGM

- **Suitable for modern, environmentally friendly vehicles with an advanced start-stop function with various onboard energy consumers.**
- **Three times longer cycle life and more resistant to deep discharging than conventional starter battery.**

FOR BATTERY APPLICATION LIST, PLEASE VISIT **WWW.LANDPORTBV.COM** OR **WWW.ACCUVIKS.BE**

LANDPORT EUROPE

PROFESSIONAL BATTERIES

Article Number	Voltage (V)	Capacity (Ah/20hr)	Length (mm)	Width (mm)	Height (mm)	Total Height (mm)	CCA (EN)	Layout	Terminal	Hold-down
Heavy Duty (HD)										
ACLPV HD60013N	12	100	286	260	226	226	640	2	1	-
ACLPV HD60026N	12	100	413	175	210	223	600	0	1	-
ACLPV HD60035N	12	100	413	172	210	233	600	1	1	-
ACLPV HD60527N	12	105	345	175	210	230	680	1	1	-
ACLPV HD60528N	12	105	345	175	210	230	680	0	1	-
ACLPV HD60530N	12	105	345	175	210	230	680	0	1	B1
ACLPV HD62034N	12	120	513	189	200	220	680	3	1	-
ACLPV HD62512N	12	125	345	175	285	285	720	0	1	-
ACLPV HD62514N	12	125	345	175	285	285	720	1	1	-
ACLPV HD63527N	12	135	360	253	212	232	760	0	1	-
ACLPV HD64020N	12	140	513	189	200	220	760	3	1	-
ACLPV HD64317N	12	143	513	223	203	223	900	3	1	-
ACLPV HD66514N	12	165	513	223	203	223	900	3	1	-
ACLPV HD68034N	12	180	513	223	203	223	1000	3	1	-
ACLPV HD70027N	12	200	518	276	222	242	1050	3	1	-
ACLPV HD73011N	12	230	518	276	222	242	1150	3	1	-
Super Heavy Duty (SHD)										
ACLPV SHD62034N	12	120	513	189	195	223	680	3	1	-
ACLPV SHD63013N	12	130	514	218	186	206	680	3	1	-
ACLPV SHD63539N	12	135	514	175	210	210	1000	3	1	B3
ACLPV SHD63547N	12	135	514	175	210	210	1000	4	1	B3
ACLPV SHD64020N	12	140	513	189	195	223	760	3	1	-
ACLPV SHD68034N	12	180	513	223	195	223	1000	3	1	-
ACLPV SHD68089N	12	180	514	218	190	210	1000	3	1	B3
ACLPV SHD73011N	12	230	518	274	216	242	1150	3	1	-
Super Heavy Duty PRO (SHD PRO)										
LMFV 64020SMF	12	140	513	189	200	220	760	3	1	-
LMFV 68034SMF	12	180	513	223	203	223	1000	3	1	-
LMFV 73011SMF	12	230	518	276	222	242	1150	3	1	-

LANDPORT EUROPE

FOR BATTERY APPLICATION LIST, PLEASE VISIT **WWW.LANDPORTBV.COM** OR **WWW.ACCUVIKS.BE**

CLASSIC BATTERIES

Article Number	Voltage (V)	Capacity (Ah/20hr)	Length (mm)	Width (mm)	Height (mm)	Total Height (mm)	CCA (EN)	Layout	Terminal	Hold-down
Classic 6V										
ACLPV 06612N	6	66	164	174	164	180	360	2	1	B4
ACLPV 08215N	6	82	215	168	177	177	360	2	1	B9
ACLPV 08411N	6	84	228	171	186	206	390	2	1	-
ACLPV 11213N	6	112	490	110	220	220	500	0	1	-
ACLPV 11215N	6	112	228	171	186	206	540	2	1	-
ACLPV 14023N	6	140	257	171	216	235	720	2	1	B1
ACLPV 16022N	6	160	302	170	220	220	760	2	1	-
ACLPV 22013	6	220	403	175	216	235	1000	2	1+1	B1
Classic 12V										
ACLPV 55716N	12	57	242	175	155	175	420	0	1	B1
ACLPV 55717N	12	57	242	175	155	175	420	1	1	B1
ACLPV 57016N	12	70	490	108	195	229	450	1	1	-

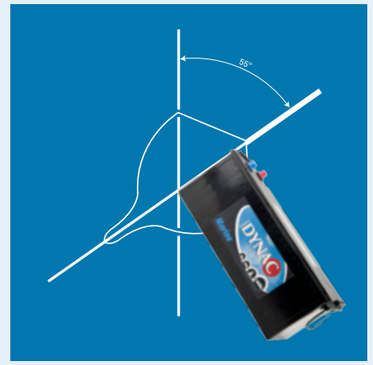
FOR BATTERY APPLICATION LIST, PLEASE VISIT **WWW.LANDPORTBV.COM** OR **WWW.ACCUVIKS.BE**

LANDPORT EUROPE

MARINE BATTERIES

LANDPORT EUROPE

Article Number	Voltage (V)	Capacity (Ah/20hr)	Length (mm)	Width (mm)	Height (mm)	Total Height (mm)	CCA (EN)	Layout	Terminal	Hold-down
Start & Light Cyclic										
LMFM 62034	12	120	503	182	193	215	680	3	1	-
LMFM 64020	12	140	503	182	193	215	760	3	1	-
LMFM 66514	12	165	503	216	193	214	900	3	1	-
LMFM 68034	12	180	503	216	193	214	1000	3	1	-
LMFM 70027	12	200	503	264	517	239	1050	3	1	-
LMFM 72511	12	225	503	264	517	239	1150	3	1	-



FOR BATTERY APPLICATION LIST, PLEASE VISIT **WWW.LANDPORTBV.COM** OR **WWW.ACCUVIKS.BE**

SEMI-TRACTION BATTERIES

Article Number	Voltage (V)	Capacity (Ah/20hr)	Capacity (Ah/5hr)	Length (mm)	Width (mm)	Height (mm)	Total Height (mm)	CCA (EN)	Layout	Terminal	Hold-down
Wet Charged											
STV 95406N	12	50	40	210	175	190	190	-	0	1	B3
STV 95551N	12	70	55	260	175	203	223	-	0	1	-
STV 96051N	12	130	105	513	189	193	223	-	3	1	B1
STV 96351N	12	180	135	513	223	193	223	-	3	1	-
STV 96801N	12	230	180	518	273	217	242	-	3	1	-
Wet Charged Traction											
DC TR190	12	200	-	513	223	193	223	1000	3	1	-
DC TR220	12	220	-	518	273	217	242	1050	3	1	-
Sealed Maintenance Free (SMF)											
STV 95502SMF	12	60	50	242	175	190	190	-	0	1	B3
STV 95602SMF	12	75	60	278	175	190	190	-	0	1	B3
STV 95752SMF	12	90	75	353	175	190	190	-	0	1	B3
STV 95804SMF	12	105	85	345	175	230	230	-	0	1	-
STV 96002SMF	12	125	100	345	175	285	285	-	0	1	-
STV 24DC	12	80	-	257	172	200	220	680	1	Dual	B1
STV 27DC	12	90	-	302	172	200	220	700	1	Dual	B1
STV 31DC	12	102	-	330	172	218	242	750	1	Dual	-
AGM											
AGM ST50	12	60	52	242	175	190	190	460	0	1	B3
AGM ST60	12	70	60	278	175	190	190	600	0	1	B3
AGM ST80	12	80	80	353	175	190	190	720	0	1	B3
AGM ST105	12	95	80	345	175	210	230	800	0	1	B3
AGM ST130	12	140	115	513	189	203	223	950	3	1	-
AGM ST180	12	170	135	513	223	203	223	1050	3	1	-
AGM ST200	12	185	155	518	274	222	242	1200	3	1	-
AGM ST220	12	220	185	518	274	222	242	1400	3	1	-

FOR BATTERY APPLICATION LIST, PLEASE VISIT **WWW.LANDPORTBV.COM** OR **WWW.ACCUVIKS.BE**

LANDPORT EUROPE

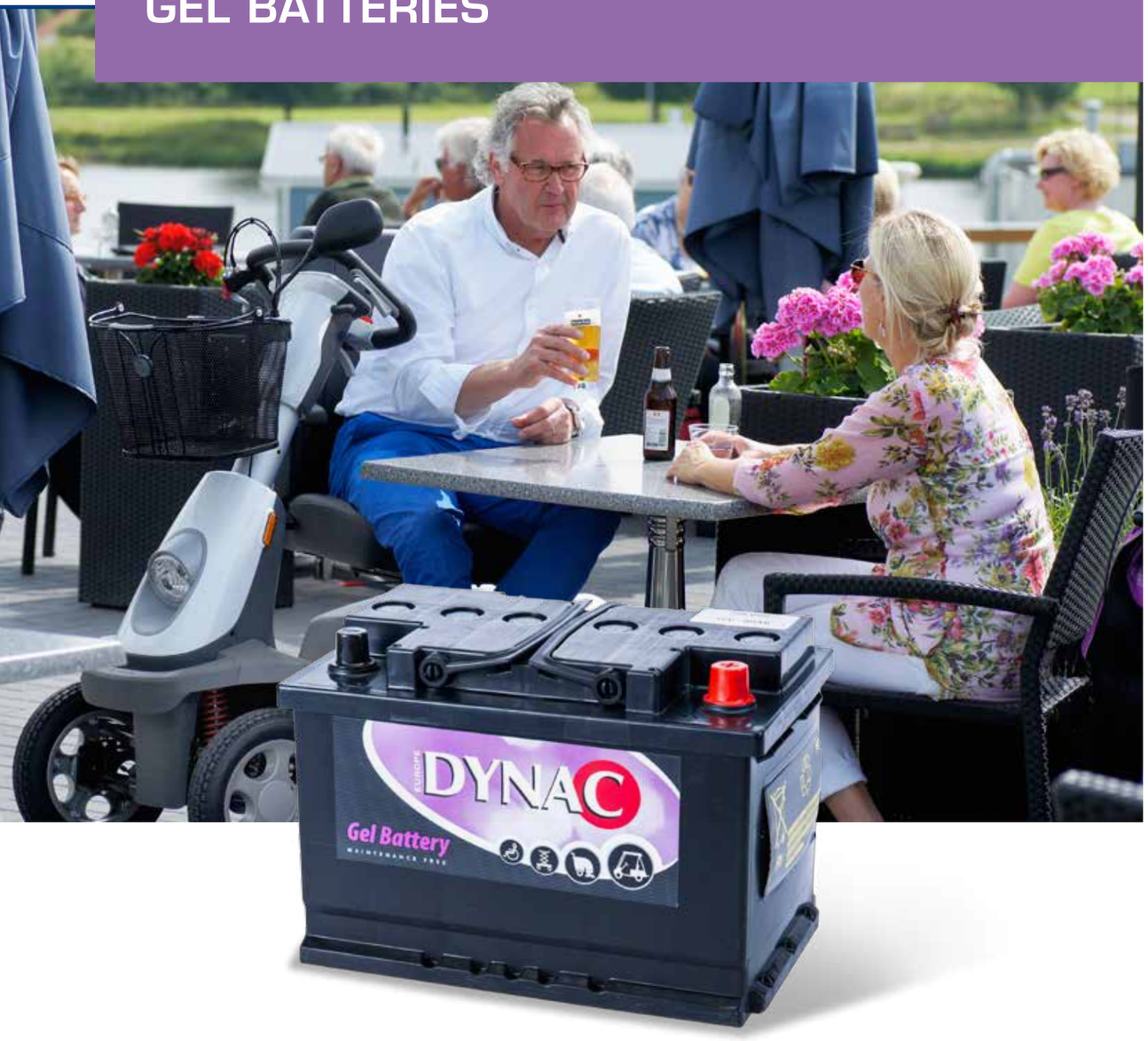
DEEP CYCLE BATTERIES

Article Number	Voltage (V)	Capacity (Ah/20hr)	Capacity (Ah/5hr)	Length (mm)	Width (mm)	Height (mm)	Total Height (mm)	Layout	Terminal	Holddown
Deep Cycle 6V										
DC US2200	6	232	181	260	181	286	286	2	Dual	-
DC US 145	6	251	213	260	181	302	302	2	Dual	-
DC US 305	6	310	261	302	181	371	371	2	Dual	-
DC L16	6	385	297	302	181	425	425	2	Dual	-
Deep Cycle 6V AGM										
DC GF6210	6	213	185	260	180	254	274	2	Dual	-
DC DTA6245	6	245	221	243	188	275	275	2	T11	-
Deep Cycle 8V										
DC US 8VGC	8	170	138	260	181	286	286	1	1	-
Deep Cycle 12V										
DC 27 TM	12	105	89	320	165	203	233	1	Dual	-
DC US 12V xC2	12	155	122	333	179	289	289	1	1	-
Tubular Plates										
TB 6PZS 195	6	250	195	245	190	285	285	2	1	-
TB 4PZS 110	12	158	117	345	170	285	285	0	1	-

FOR BATTERY APPLICATION LIST, PLEASE VISIT **WWW.LANDPORTBV.COM** OR **WWW.ACCUVIKS.BE**

LANDPORT EUROPE

GEL BATTERIES



Article Number	Voltage (V)	Capacity (Ah/20hr)	Length (mm)	Width (mm)	Height (mm)	Total Height (mm)	Layout	Terminal	Holddown
Gel 6V									
GB 180/6	6	180	244	190	275	275	2	1	-
Gel 12V									
GB 016	12	16	181	76	167	167	0	B	-
GB 019	12	19	185	80	170	170	0	B	-
GB 025	12	24	176	167	126	126	0	B	-
GB 030	12	30	197	132	180	180	1	B	-
GB 040	12	40	210	175	175	175	0	1	B4
GB 060	12	60	278	175	190	190	0	1	B3
GB 080	12	80	353	175	190	190	0	1	B3
GB 085	12	85	330	171	236	236	1	1	-
GB 110	12	115	286	269	230	230	2	1	-
GB 120	12	120	513	189	223	223	3	1	-
GB 120S	12	125	345	175	290	290	0	1	-
GB 140	12	140	513	223	223	223	3	1	-
GB 210	12	210	518	276	242	242	3	1	-

FOR BATTERY APPLICATION LIST, PLEASE VISIT **WWW.LANDPORTBV.COM** OR **WWW.ACCUVIKS.BE**

LANDPORT EUROPE

CHARGERS & BOOSTERS

LP

LANDPORT EUROPE

Article Number	Description	Volt	Amp	
PC SPI2	Landport Charger/Maintainer Automatic charger for lead-acid batteries up to 25 Ah 3x faster: multi-stage charging for added precision, safety and battery life. Powered by Shumacher	6/12 V	2,0 A	
PC SPI3	Landport Charger/Maintainer Automatic charger for lead-acid and LITHIUM LIFEPO4 batteries up to 50 Ah 3x faster: multi-stage charging for added precision, safety and battery life. Powered by Schumacher	12 V	3,0 A	
PC4L 3600	4 Load Charge Box 3.6 Covers most types of batteries from 1,2 Ah to 50 Ah. The modus is easily changed with the MODE-key which emphasizes how uncomplicated it is and offers a simple flexibility.	12 V	0,8/3,6 A	
PC4L 7000	4 Load Charge Box 7.0 Particularly suitable for home-mobiles, buses, agricultural machinery and boots with capacities from 12V: 14 Ah to 130 Ah and 24V: 14 Ah to 60 Ah.	12/24 V	7,0/3,5 A	
PG GYSTECH 3800	Powerful, compact and light Automatic charger for all types from 1,2 Ah to 60 Ah	12 V	0,8/3,8 A	
PG GYSTECH 7000	Competitive, space saving and light Automatic charger for all types from 12V: 14 Ah to 130 Ah and 24V: 14 Ah to 60 Ah	12/24 V	7,0/3,5 A	
PG GYSFLASH 4A	Powerful, compact, light and water proof. Automatic charger for all types from 1,2 to 70 Ah	12 V	0,8/4A	

Article Number	Description	Volt	Amp	
PG GYSFLASH 7A	Powerful, compact, light and water proof (IP 65) Automatic charger for all types from 1,2 Ah to 130 Ah	12 V	0,8/7 A	
PG BATIUM 7-12 PG BATIUM 7-24	GYS Charger Batium serie guarantees maximum effectiveness and security. Automatic charger for all types from 15 Ah to 130 Ah	6/12 V 6/12/24 V	3/7 A 3/7 A	
PG BATIUM 15-12 PG BATIUM 15-24	GYS Charger Batium serie guarantees maximum effectiveness and security. Automatic charger for all types from 35 Ah to 225 Ah	6/12 V 6/12/24 V	7/10/15 A 7/10/15 A	
PG BATIUM 25-24	GYS Charger Automatic charger for all types from 35 Ah to 350 Ah. Also suitable for Deep Cycle batteries from 35 to 180 Ah	6/12/24 V	7/15/25 A	
LBC 500 serie (on request)	Xenteq Chargers LBC 500 serie Chargers available from 12V 10A to 24V 5A			
ProMax 200 serie (on request)	Xenteq Chargers ProMax 200 serie Chargers available from 12V 15-100A and 24V 10-70A			
TBC 600 serie (on request)	Xenteq Chargers TBC 600 serie Cahrgers available form 12V 15-50A and 24V 10-40A			

Article Number	Description	Volt	Amp	
PG GYSPACK AUTO	GYS 12V portable booster pack Ideal for car emergency boost.	12 V	1250 A	
PG GYSPACK PRO	GYS 12V portable booster pack Instantaneously starts cars, camper vans and vans. Also 12V DC power supply including LED light.	12 V	1750 A	
PG GYSPACK TRUCK	GYS 12/24V portable boost pack Instantaneously starts cars, camper vans, vans and trucks. Also 12V DC power supply including LED light.	12/24 V	3200 A 1600 A	
STARTPACK PRO 12.24 (on request)	GYS 12/24V high performance booster Delivers exceptional power on 12V or 24V to start a wide range of vehicles including trucks and buses.	12/24 V	6200 A 3100 A	
PG GYSPACK OBD	GYS Memory Saver Saves the internal memory of your car when it is necessary to disconnect the battery. Compact, protable and easy to use.	12 V		
PM MDX-325P	Midtronics Battery Tester 100-900 CCA (EN) (integrated printer)	12 V		
PM MDX-335P	Midtronics Battery Tester 100-900 CCA (EN) (integrated printer)	12 V		
PM MDX-645	Midtronics Battery Tester 100-1200 CCA (EN)	6/12 V		
PM MDX-645P	Midtronics Battery Tester 100-1200 CCA (EN) (integrated printer)	6/12 V		
(on request)				

Article Number	Description

POWERSLAVE Electron 950

Volts	12 Volts
Amps	950 A
CCA	420 A / -18°C
Electonically protected	Full
Cables	35mm2/1m70
Clamps	740 A
Weight	15 kg
H*L*W	350*330*130
Spikes filter	900 V 2,5 A
Charger	Full automatic inside
MEMO Output	Yes
Generator test	13,5 V

POWERSLAVE Electron 1100S

Volts	12 Volts
Amps	1100 A
CCA	520 A / -18°C
Electonically protected	Full
Cables	35mm2/1m70
Clamps	740 A
Weight	17 kg
H*L*W	350*330*130
Spikes filter	900 V 2,5 A
Charger	Full automatic inside
MEMO Output	Yes
Generator test	13,5 V

POWERSLAVE Electron V1200ES

Volts	12 Volts
Amps	1200 A
CCA	520 A / -18°C
Electonically protected	Full
Cables	35mm2/1m70
Clamps	750 A
Weight	17 kg
H*L*W	350*330*130
Spikes filter	900 V 2,5 A
Charger	Full automatic inside
MEMO Output	Yes
Generator test	13,5 V

POWERSLAVE Powerpack T1250

Volts	12 Volts
Amps	1250 A by 7 Volts
CCA	715 A / 7 Volts -18°C
Electonically protected	Full
Peak amps	Short circuit test 4200 A/0,5 volts
Cables	50mm2/1m70 Hi flex
Clamps	1000 A
Weight	23,9 kg
H*L*W	270*310*190
Spikes filter	900 V 2,5 A 2,5 Ka
Charger	12 V/2 A full automatic inside
MEMO Output	Yes
Generator test	13,5 V
Trolley	Option

Article Number	Description

POWERSLAVE Powerpack V1200

Volts	12 & 24 Volts
Amps	1100/950 A by 7 & 14 Volts
CCA	2 x 420 A / 7 volts -18°C
Electonically protected	Full
Peak amps	Short circuit test 3600 A/0,5 volts
Cables	50mm2/1m70 Hi flex
Clamps	750 A
Weight	25 kg
H*L*W	210*330*210
Spikes filter	900 V 2,5 A 2,5Ka
Charger	2 x 12 V / 2A Full automatic inside
MEMO Output	
Generator test	13,5 V & 27 V
Trolley	Option

POWERSLAVE Powerpack V1500

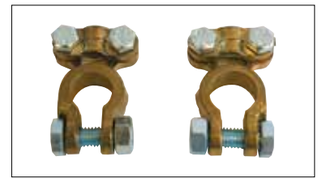
Volts	12 & 24 Volts
Amps	1250/1500 A by 7 & 14 Volts
CCA	2 x 520 A / 7 volts -18°C
Electonically protected	Full
Peak amps	Short circuit test 4800 A/0,5 volts
Cables	50mm2/1m70 Hi flex
Clamps	1000 A
Weight	32 kg
H*L*W	(320+550)*400*260
Spikes filter	900 V 2,5 A 2,5Ka
Charger	2 x 12 V / 2A Full automatic inside
MEMO Output	
Generator test	13,5 V & 27 V

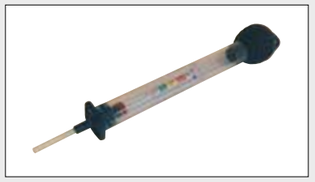
POWERSLAVE Powerpack V1900

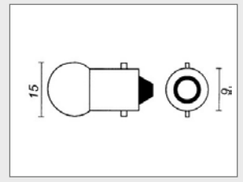
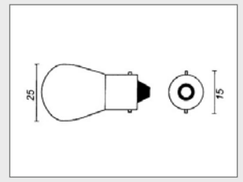
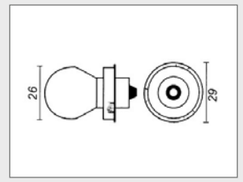
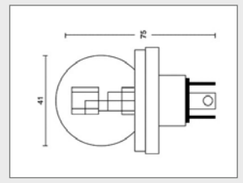
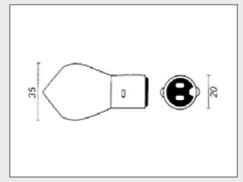
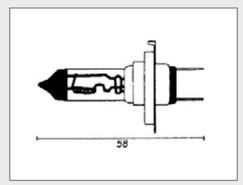
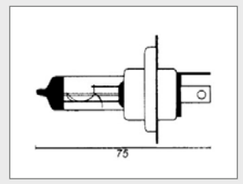
Volts	12 & 24 Volts
Amps	1500/1900 A
CCA	2 x 815 A / 7 volts -18°C
Electonically protected	Full
Peak amps	Short circuit test 8400 A/0,5 volts
Cables	50mm2/2m50 Hi flex
Clamps	1000 A
Weight	56 kg
H*L*W	(630+320)*450*380
Spikes filter	900 V 2,5 A 2,5Ka
Charger	2 x 12 V / 7A Full automatic inside
MEMO Output	
Generator test	13,5 V & 27 V
Wheels	Airwheels + brake wheel

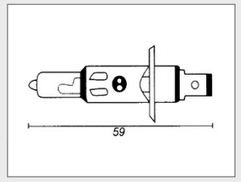
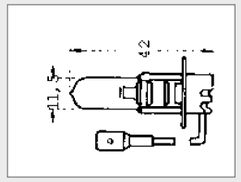
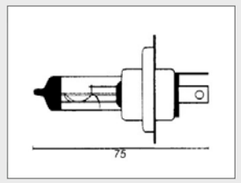
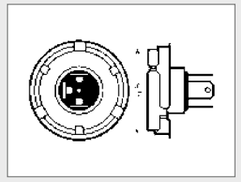
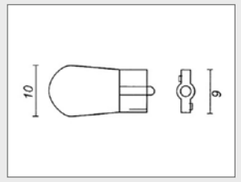
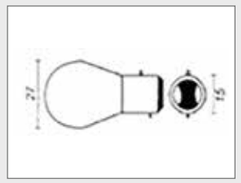
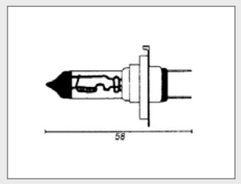
ACCESSORIES

LANDPORT EUROPE

Article Number	Description	
BALV POOLPOS	Clamp for standard battery terminal (+)	
BALV POOLNEG	Clamp for standard battery terminal (-)	
BALV TPOS	Clamp for standard battery terminal (+)	
BALV TNEG	Clamp for standard battery terminal (-)	
BALV JAPPOS	Clamp for Japanese battery terminal (+)	
BALV JAPNEG	Clamp for Japanese battery terminal (-)	
BALV FORDPOS	Ford adaptor clamp (+)	
BALV FORDNEG	Ford adaptor clamp (-)	
BALV MANPOS	Heavy Duty clamp for stand terminal (+)	
BALV MANNEG	Heavy Duty clamp for stand terminal (-)	
BALV USA	USA adaptor clamp (set)	
BALV QUICK SET	Terminal connector Quick set	

Article Number	Description	
BALV 100003	Terminal Japanse-standard adaptor set (3>1)	
BALV M6-STANDARD BALV M8-STANDARD	M6-standard adaptor set for M6 insert M8-standard adaptor set for M8 insert	
BALV 100002	Butterfly nut M8	
BALV 100005	Ventilation plugs and tube	
BALV GEFO	Acid gravity tester	
BALV 100001	Sulphuric Acid 37% 1 ltr Sulphuric Acid 37% 5 ltr (on request)	
BALV WATER5	Deminaralised water 5 ltr	

Art. No.	Description	Volt	Watt	
LAMP 2200111 LAMP 2200120 LAMP 2200121	BA 9 S BA 9 S BA 9 S	6 V 6 V 12 V	5 4 4	
LAMP 2200302 LAMP 2200304 LAMP 2200305 LAMP 2200306 LAMP 2200381	B 15 S B 15 S B 15 S B 15 S B 15 S	6 V 12 V 6 V 12 V 12 V	5 5 10 10 21	
LAMP 2200401 LAMP 2200410	P 26 S P 26 S	6 V 12 V	15 15	
LAMP 2200501	P 45 T	12 V	45/40	
LAMP 2200518 LAMP 2200520 LAMP 2200521 LAMP 2200523 LAMP 2200528 LAMP 2200529	BA 20 D BA 20 D BA 20 D BA 20 D BA 20 D BA 20 D	6 V 6 V 6 V 12 V 12 V 12 V	15/15 25/25 35/35 35/35 45/40 25/25	
LAMP 2201607	H7 PX 26 D	12 V	55	
LAMP 2201610	H1 PX 43 T	12 V	35/35	

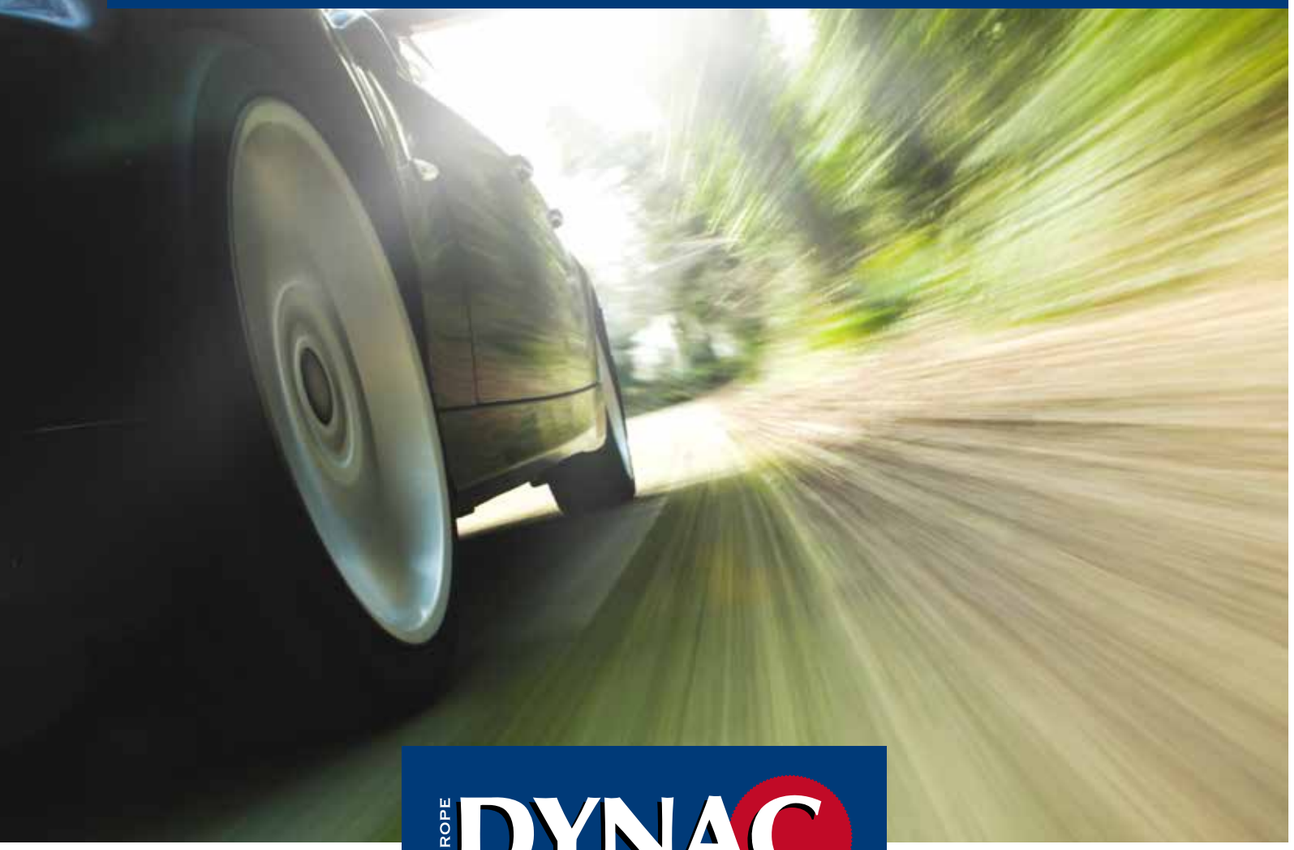
Art. No.	Description	Volt	Watt	
LAMP 2201655	H1 P 14,5 S	12 V	55	
LAMP 2201658	PK 22 SH 3	12 V	60/55	
LAMP 2201661 LAMP 2201671 LAMP 2251661 LAMP 2261661	H4 P 43 T H4 P 43 T H4 P 43 T +30% H4 P 43 T Xenon	12 V 12 V 12 V 12 V	60/55 100/80 60/55 60/55	
LAMP 2201666	H4 P 45 T	12 V	60/55	
LAMP 2201732	W 2,1 x 9,5 D	12 V	5	
LAMP 2203380 LAMP 2203381	BAY 15 D BAY 15 D	6 V 12 V	21/5 21/5	
LAMP 2251607	H7 PX 26 D +50% Xenon	12 V	55	

TOOLS

LANDPORT EUROPE

Art. No.	Description	
GERE 1044	38 Piece socket set 1/4	
GERE 1049	45 Piece socket set 1/4 + 3/8	
GERE 1047	60 Piece socket set 3/8	
GERE 1048	93 Piece socket set 1/4 + 1/2	

DYNAC BATTERIES:
Technical information



LANDPORT EUROPE

ASSEMBLY, MAINTENANCE AND TESTING

Important - caution
The oxyhydrogen gas contained in the battery is highly explosive. Always make sure that the charger is switched off before connecting or disconnecting the battery: one tiny spark is enough to cause an explosion that could permanently damage the face and eyes. In the event of an accident, in which acid splashes into the eyes or onto bare skin, rinse immediately using plenty of water.

If acid splashes into the eyes – contact your doctor.

Assembly in the car
Cars with alternators have the negative connected to the earth. This may vary with older models (see the car manual for assembly). Clean the terminal posts and base plate with warm water. Always assemble the conductor cable first, and the earth wires later. This will prevent short-circuiting caused by the use of tools (which may cause slight damage). Only use good quality tools. After assembly, grease the cable clamps and terminal posts with clean, petroleum jelly or approved grease. The battery should be screwed down well, but should not be overly tightened.

NB! When changing the battery or carrying out repairs which require the battery to be disconnected from the car, we instruct you to provide an alternative power supply for the car, e.g. by using an "external" battery. If you do not do this the electronics in the car may be destroyed in the worst case.

Maintanance
A battery is a vital element of the electrical system. Normally, the system itself will keep the battery charged. In the case of continual short journeys and heavy power usage additional charging may be required, particularly during the cold-weather season. Top up with distilled or chemically purified water only. Never use acid or special additives. If a relatively new battery needs to be topped up regularly this may indicate that the battery is overloaded. In such cases the electrical installation should be inspected and the defect repaired. Avoid chemical or other types of products that promise "miraculous" changes to old or worn batteries.

Testing
If there is any doubt that the battery is no longer working satisfactorily it should be tested. The most simple and best means of testing a battery and its state-of-charge is to use a hydrometer. The measurement of the specific gravity in each cell will determine how the battery should be treated further.
If the battery is discharged, it will need to be recharged before proceeding with the following check (see the battery test table).
If a relatively new battery is discharged and the user has left on the lights, radio, etc., it will need to be recharged. If the car has not been driven sufficiently during the wintertime and there has been substantial power usage, the battery will need to be recharged.
This assumes that the regulator/dynamo is functioning satisfactorily. In the case of continually low specific gravity, the most probable cause is discharge. If, on the other hand, no reasonable explanation can be found as to why the battery is discharged, the cause should be sought outside the battery. In such cases, both the starter motor and the dynamo should be checked. Many motorists are under the impression that the dynamo charges sufficiently and only the built-in indicator is not lit up. This is no absolute guarantee for sufficient charging current, as that the indicator light can go out at 1-2 Amps, without this being sufficient enough to charge the battery.
The charging current should therefore be checked regularly. Measured across the terminal posts, the charging voltage of the vehicle should read 14.2 – 14.4 volts for temperatures above 25°C and for high engine turnover (approximately 2000 revs).

NB! If the reading is lower this means that the battery does not charge fully while driving and will need to be charged by an external battery, which will often depend on the amount of charging voltage for the required level.

Be aware that for normal driving it will take approximately 20 minutes for the power that will be used for a good cold start to be replaced (recharged). It is a fact that most of the damage to batteries is caused by a lack of charging. For this reason, all those who are involved with batteries should be aware of the importance of correct charging.

The effect of the cold
Most people have experienced on at least one occasion that the capacity of a battery is reduced in cold weather. The effect of the cold on the starting capacity is indicated in the table below:

A fully charged battery that is loaded at:	
+25°C gives	100% capacity
0°C gives	65% capacity
-18°C gives	40% capacity

At –18°C the starting capacity is therefore reduced by 60%. The reason for this is that the resistance in the battery rises, and that the chemical process goes more slowly. At the same time, the reduced effectiveness of the battery places higher demands on starting the motor during the winter as motor oil becomes more viscous during low temperatures. When we know that at –18°C a battery only operates at 40% of the starting capacity, it is easy to understand why starting problems arise during even lower temperatures. It is therefore important to keep the battery fully charged.
The freezing point of electrolytes for the following range of concentrations is:

The freezing point of electrolytes for the following range of concentrations is:	
1.100 freezes at	-7°C
1.150 freezes at	-15°C
1.200 freezes at	-26°C
1.250 freezes at	-52°C
1.280 freezes at	-68°C

Self-discharge
When a battery is unused during long-term parking or storage, minor discharge will take place. The amount of self-discharge varies with the temperature and the age of the battery. Self-discharge decreases by 50% for every 10°C reduction in temperature. That is to say that a battery that can be stored for 4 months at +20°C can be stored at 0°C for approximately 9 months at the same rate of energy loss. Apart from self-discharge there are often a number of circumstances that continually deplete the battery of power.

Activating dry-charged batteries
The plates in a dry-charged battery are specially treated to give them a longer service life. Before the battery can be used, it is filled with acid before being left for 30 minutes. For topping up with acid the temperature of the acid and the battery should be +20°C. As a rule, is it not necessary to charge a dry-charged battery before use, although it can be advantageous to take the time to do so. If activation takes place at a temperature lower than +15°C or if the battery needs to be stored for more than 12 hours after being topped up with acid, the battery should be charged for two hours up to 1/10 of its capacity (until there is a continual emission of gasses in the collective cells).
• Dry-charged batteries can be stored in dry air with a constant temperature, preferably no longer than two years.
• During production as well as transport, the battery should not be accessible for damp.
• When topping up with acid, the acid and battery should be at least +15°C , preferably approximately +20°C.

We therefore instruct you to use the following method when activating:
1. Top up the thinned sulphuric acid (specific gravity of 1.28 at 20°C) for all cells until 5mm above the separator, or until the indicated level.
2. Allow the battery to stand for 30 minutes, depending on the temperature.
3. If possible charge the battery again. This will confirm that the battery is in good working order if, after a brief period, there is a continual emission of gases in the collective cells.
If the battery is assembled using the incorrect polarity in an installation that uses an alternator, this will cause substantial damage.

NB! Always check that the voltage and polarity is correct before using the battery.

SPECIFIC GRAVITY AND CHARGING

Temperature increase:	
2°C	Battery is perfect
5°C	Battery is slightly drained
10°C	Battery is drained
15°C	Battery is heavily drained

The greater the increase in temperature, the more important it is that the battery is recharged as quickly as possible. A long journey with the car in which the battery is fitted will give a good charge if the load charge is 14.2 volts at +25°C. In the winter, an additional 0.3 volts is required for every 10 degrees reduction in temperature, or in other words: at –10°C the load charge should be 15.15 volts. This means that cars that are only used for short journeys or in traffic and have no motor heating or repeated cold starts require external chargers in very cold periods. Raising the specific gravity of a dry-charged battery that has "become slightly drained" during storage will require 2 to 3 times more charging time than a normally charged battery with the same specific gravity. The battery is fully charged when the specific gravity is 1.28.

Measurement
The most simple manner of measuring the specific gravity is to use a hydrometer. When using a hydrometer, sufficient electrolytes must be sucked into the syringe, so that the float floats freely. The specific gravity can then easily be read from the scale on the float.
In order to record a correct acid measurement the electrolytes should be mixed well. After topping up with distilled or chemically purified water, the water should first be given the opportunity to mix with the rest of the electrolyte mixture before measurement takes place. Avoid spilling any acid. Acid is highly corrosive and acid splashed in the eyes or on bare skin is harmful. Acid can destroy clothing, wood, metal and varnish. The table below shows the corresponding ratios between acid and the state-of-charge of the battery in percentages.

The specific gravity of elektrolytes:	Battery state-of-charge +25°C:	Battery state-of-charge -18°C:
1.280	100%	100%
1.240	75%	50%
1.200	50%	Weak
1.160	25%	-
1.120	0%	-

Temperature correction
The float scale on the hydrometer is normally based on a temperature (acid) of +25°C. For higher or lower temperatures the result read should be corrected as the specific gravity varies with temperature. It is extremely important to pay attention to this during the wintertime.
For every 10°C below +25°C 0.007 is subtracted from the scale and for every 10°C above +25°C 0.007 is added. The table below shows: 1. The acid temperature, 2. The measured specific gravity, 3. The corrected specific gravity. The table shows that the gravity of electrolytes measured at 1.240 for an acid temperature of –18°C is actually 1.208. This means that the battery has a state-of-charge of 50% instead of 75% that was shown by the initial measurement. Maintenance-free batteries cannot be measured using these methods as they have no removable caps. The following method is used for these batteries: The Open Circuit Voltage of the battery is used to find the average specific gravity. The Open Circuit Voltage is measured with a digital voltmeter after the battery has been disconnected (i.e. with no recharging or discharging) for a minimum period of 6 – 8 hours.

Open Circuit Voltage (at +25°C) = (specific gravity + 0.84) x the number of cells
Specific gravity (at +25°C) = (Open Circuit Voltage: number of cells) – 0.84

Example:
Measured voltage = 12.65 volts, number of cells is 6, average specific gravity: (12.65 : 6) – 0.84 = 1.27 g/cm3.

1. Acid temperature:	2. Measured specific gravity g/cm3:			3. Corrected specific gravity g/cm3:		
°C	A	B	C	A	B	C
-30°C	1,28	1,24	1,20	1,241	1,201	1,161
-20°C	-	-	-	1,248	1,208	1,168
-10°C	-	-	-	1,255	1,215	1,175
0°C	-	-	-	1,262	1,222	1,182
10°C	-	-	-	1,270	1,230	1,190
15°C	-	-	-	1,273	1,233	1,190
20°C	-	-	-	1,276	1,236	1,196
25°C	-	-	-	1,280	1,240	1,200
30°C	-	-	-	1,284	1,244	1,204
35°C	-	-	-	1,287	1,247	1,207

USES

The starter battery
When identifying which starter battery to purchase, the following should be taken into consideration:
• The space reserved for the battery
• The type of battery terminal used
• The desired starting capacity and reserve capacity/total amp hours (Ah)
Although the external measurements of the battery are often given by car and machinery manufacturers, the internal structure is determined by the battery manufacturers. Batteries with the same external measurements often have differing internal structures. The structure depends on the technical- and climate-related requirements that the battery should satisfy. For starting batteries, the total surface area of the plates is of great importance.
The plate surface area depends on the plate size and number of plates in the battery. It is important to be clear about this, and for starting purposes we instruct people to choose batteries with the largest possible surface area.

Leisure batteries
Leisure batteries refers to lead accumulators that are specially constructed for less discharge over a longer period of time. In this structure a relationship is employed between positive and negative active materials that differs from a battery that has been primarily manufactured for starting purposes.
These type of batteries are often referred to as deep cycle batteries and are used for leisure purposes in caravans, boats, campers and as starter batteries in boats. Leisure batteries are also recommended for use with solar panels.

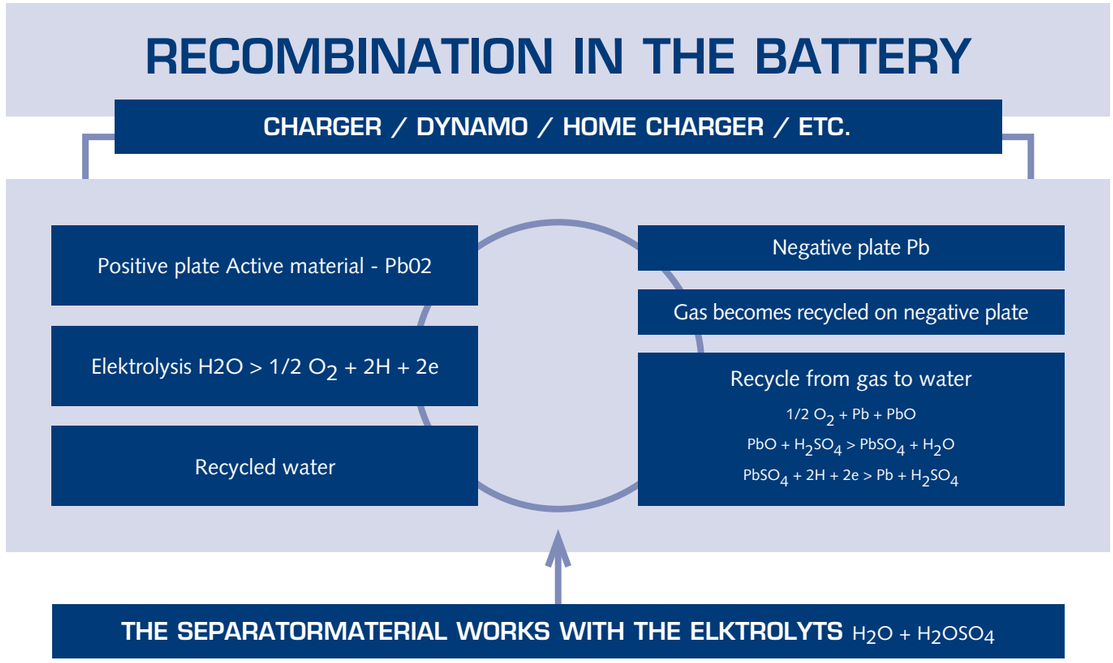
Heavy Duty
The special strengthening in the plate groups provides extremely good additional resistance to damage to the battery that may result from extreme vibration. HD batteries are a range of batteries that are especially suited for use where repeated and heavy-duty battery discharge is experienced. Examples are buses, trucks, delivery vans used for short distances and various types of marine vessels. For the latter of these examples, batteries are rarely or never used for starting motors in extremely low temperatures. Separators with fibreglass fill are used in Heavy Duty batteries.

Recombination batteries
Just as for ordinary batteries, various structures and other methods of use are possible here. Batteries for stationary, starting and continual use have practically all the normal features but do not use water on the negative plate, in other words: the gas is recycled. The gas emission is transformed into water, which is where the name “recombination” originates from. During use, additional pressure is released via a valve, resulting in the name “valve-regulated”. Both names refer to the same process. NB! Recombination batteries should not be opened.

Advantages
• No topping up with water.
• Completely leakage free.

Disadvantages
• Increased risk of dehydration during overloading/high temperatures; not possible to top up water.
• State-of-charge check is more difficult to carry out; use of hydrometer not possible.

As a consideration, the measurement will be more correct when using more advanced equipment.


RECOMBINATION IN THE BATTERY
CHARGER / DYNAMO / HOME CHARGER / ETC.
Positive plate Active material - Pb02
Elektrolysis H2O > 1/2 O2 + 2H + 2e
Recycled water
Negative plate Pb
Gas becomes recycled on negative plate
Recycle from gas to water
1/2 O2 + Pb + PbO
PbO + H2SO4 > PbSO4 + H2O
PbSO4 + 2H + 2e > Pb + H2SO4
THE SEPARATORMATERIAL WORKS WITH THE ELKTROLYTS H2O + H2OSO4

BATTERY-TEST TABLE

Test result	Course	Solution
1. The specific gravity of the electrolytes is higher than 1.32 but constant in all cells.	The battery is probably overfilled with strong acid or level regulated with acid	Specific gravity adjustment. Charge the battery. Extract part of the electrolytes from each cell, and replace with distilled water. Recharge and check the specific gravity. Repeat this process until the specific gravity reaches 1.280 for a fully-charged battery.
2. The specific gravity is constant in all cells, but lower than 1.210.	a) The battery is partially charged. The dynamo has a charging voltage that is too low	Charge the battery with a normal voltage. Stop when the specific gravity reaches 1.28, there is equal gas emission from all cells and the specific gravity remains unchanged two hours after recharging.
	b) Bad contact between the terminal screw and the battery terminal posts.	Unscrew the terminal screw and clean the contact surfaces of the terminal screw and battery terminal posts. Attach the terminal screw to the battery and screw on properly. Measure the load voltage across the + and – terminal posts of the battery at approximately 2000 cycles. Repair any defects in the dynamo.
3. The specific gravity varies from cell to cell by more than 25 points (0.025).	a) A worn battery.	Adjust the specific gravity to 1.400 to avoid the necessity of replacing part of the electrolytes with acid. After charging with 0.5 A for each positive plate and in minimum 48-hour period, maximum 96 hours, the specific gravity should be checked. If it has significantly dropped and/or is uneven from cell to cell, the battery should be exchanged.
	b) Not enough charge.	Charge the battery with a charging current that increases in strength by 5% of the 20-hour capacity. A 60Ah battery should be charged with a 3A charger (the charging current should be 3A). NB! Make sure that a part of the chargers give less Amperes than the indication for that model suggests.
4. The specific gravity is so low that it cannot be read on the hydrometer.	a) The electrolytes have been too strongly diluted during water level regulation.	The battery should be well charged and the specific gravity adjusted to 1.280 (see point 3).
	b) Absolute discharge.	Allow the battery to charge. Charge until the specific gravity is stable, between 1.280 and 1.300.
	c) Has had undesirable discharge owing to lights or radio, for example.	Charge the battery.
	d) Break in contact between battery and dynamo.	Repair the fault.
	e) Dynamo failure.	Contact an authorized garage.
5. No electrolytes, dry battery.	a) Battery is badly maintained or poorly topped up.	Top up to correct electrolytes level (approx. 5 – 10mm above the plate groups) with distilled water. Charge the battery slowly at a low amperage.
	b) Battery has tipped over, electrolytes have drained away.	Fill the battery with acid with a specific gravity of 1.240 until the correct level. Charge the battery well, and adjust the specific gravity after charging.
	c) Breakage in the battery case.	A new battery is necessary.
6. Battery is not receiving any charging current. By a sulphated battery we mean that the sulphur obtained during charging has crystallized. A sulphated battery is extremely difficult to charge. Therefore, try charging a battery for longer and if necessary use a higher voltage (up to 24 Volts) for several minutes, until the battery starts to receive the charging current. Leave the battery on an electronically-regulated charger until the current remains stable for 2-3 hours. NB! The battery should never remain connected when using the above mentioned voltage level during charging.	a) The battery is heavily sulphated.	A new battery is necessary.
	b) Bad contact between terminal screw and battery terminal posts.	See point 2b
	c) Dynamo failure.	Read off from an induction ampere meter, call in a car electrician.
	d) Breakage in the wiring between dynamo and battery or earth.	New cable, new earthling, check earth contact.
	e) Battery is worn.	A new battery is necessary.

BATTERY-TEST TABLE

Test result	Course	Solution
7. The charged battery discharges after a short storage period.	a) Short-circuiting between the plates.	A new battery is necessary.
	b) Breakage in wiring.	See point 6d
	c) Battery is worn.	A new battery is necessary.
8. The battery is unable to sustain self starter current.	a) Battery is discharged.	Charge the battery.
	b) Battery is relatively topped up (only the parts of the plates that are covered with electrolytes are working).	See point 5a. If this does not help, the parts of the plates that were above the electrolytes level were heavily sulphated and this is not removable.
	c) The battery is heavily sulphated.	A new battery is necessary.
	d) Bad contact between terminal screws and terminal posts.	See point 2b.
	e) Short-circuiting in the battery.	A new battery is necessary.
	f) Dynamo failure.	See point 6c.
	g) Breakage in wiring.	See point 6d.
	h) Reduced battery effect, discharged battery.	Charge battery, check charge system.
	i) Battery is defective.	A new battery is necessary.
9. Plates under the battery are wet and attacked by acid.	a) Hole in battery case.	A new battery is necessary.
	b) Electrolytes level is too high.	Adjust the level to the correct height, approximately 5 – 10mm above the plate groups. Dry the battery tops and wash the plates with soda solution to neutralize the acid.
10. Battery continues to warm up and “boil”.	a) Battery exposed to overcharging.	Voltage regulator should be adjusted or changed.
	b) Battery topped up with acid instead of distilled water. Acid concentration too strong.	Adjust the specific gravity of the electrolytes as in point 3a.
11. The lights flicker or go out.	a) Breakage in wiring network.	See point 6d.
	b) Loose terminal clamps.	See point 2b.
	c) Bad contact.	See point 2b.

LANDPORT EUROPE

DISCLAIMER

Users are cautioned that the information in this book was the most current information provided to us at the time of publication. The information is subjected to change without notice. Users should use the most current edition of the Landport Motorcycle Battery Replacement Information Book. Landport expressly denies any responsibility for the accuracy provided to us. While we have made every effort to accurately catalogue the replacement battery information contained in this book, Landport denies any liability for damages as a consequence of using the information in this book. Users should also attempt to obtain replacement battery information from the o.e. manufacturer's user manual or service department for their specific application.

All orders are being agreed and executed with our general sales- and delivery conditions, as registered at the chamber of commerce, under number 18050673.

POWER ON COMMAND

GENERAL TERMS & CONDITIONS OF DELIVERY AND PAYMENT OF LANDPORT B.V.

GENERAL

1.1 Landport's General Terms and Conditions apply to all deliveries of goods and the provision of services by Landport to the Customer.
1.2 Additions or changes to these General Terms and Conditions shall only be binding if they have been confirmed by us in writing. Any conditions of the Customer shall not apply.

OFFERS

2.1 Our offers are without obligation, unless an offer explicitly states otherwise.
2.2 We are only bound after we have accepted an order in writing or by e-mail, or after we have actually carried out an assignment.

PRICE

3.1 The prices referred to in catalogues, price lists and the like are without obligation and can be changed by us. At the customer's request we shall confirm in writing the prices that apply at any particular point in time.
3.2 Our offer shall state whether the sales price offered therein is without obligation or binding.
3.3 The sales prices referred to in our offers always exclude VAT.
3.4 The offer shall also state which taxes, entitlements, excises and levies imposed by the government are not included in the sales prices.
3.5 Changes in the taxes, etc. referred to in 3.3 and 3.4 shall be charged on to the customer, in which case the Customer shall not be entitled to cancel the purchase or order.
3.6 Changes in factory or importer's prices, in exchange rates, etc. shall also be charged on to the Customer, in which case the Customer shall be entitled to cancel the purchase or order without charge, by reporting such to us in writing within one week after we have informed the Customer of the change.

DELIVERIES

4.1 Delivery deadlines issued by us are determined to the best of our ability on the basis of the data known at the time the agreement was entered into.
4.2 We are not bound by delivery deadlines which cannot be met, nor are we liable for the resulting loss or damage, unless the exceeding of the delivery deadline can be attributed to intent or gross negligence on our part.
4.3 In the event of inordinate exceeding of the delivery deadline, we shall consult with the Customer. If said consultations do not lead to the result desired by the Customer and ourselves, the Customer and we shall be entitled to cancel the agreement without charge.
4.4 We shall have fulfilled our obligation to deliver by offering the goods once to the Customer, in accordance with that stated on the matter in the offer or agreement. The customer shall in that case be obliged to take receipt of the goods.
4.5 In the event of non-receipt, we shall put the goods into storage at the expense and risk of the Customer. In such cases, our warehouse shall apply as the delivery destination and the invoice for the delivered goods, plus a storage surcharge of 15%, as a notification of storage. We shall charge the Customer for all the costs of retention and storage, plus a 25% surcharge.
4.6 The risk related to the goods shall pass to the Customer at the moment of delivery.
4.7 Complaints relating to deficiencies which are discernible upon delivery or after inspection must be communicated to us as soon as possible in writing and, in any event, no later than five working days after delivery.

OWNERSHIP

5.1 Our ownership of the goods passes to the Customer after the latter has fulfilled all payment obligations vis-à-vis us.
5.2 The Customer is not entitled to alienate or encumber the goods or transfer them in any other way to the control of third parties as long as ownership has not been transferred, unless such occurs with our explicit, prior permission. We are entitled to attach conditions to said permission.

PAYMENT

6.1 Payment shall be made in cash (which also includes transfers to our bank or Giro account) upon delivery, unless agreed otherwise in writing.
6.2 In the event of non-payment or late payment, the Customer shall be legally in default, without a notice of default having to be given. The Customer shall then owe us interest from the due date of the invoice which shall be equal to the statutory interest rate, increased by 3% each year. In addition, we are entitled to pass on the claim for collection, whereby the Customer shall owe us all the costs incurred during collection. The level of these costs is set at 15% of the invoice amount, with a minimum applying of € 100,= such without prejudice to the interest referred to in the second sentence of this section and without prejudice to any legal costs owed.

GUARANTEE & LIABILITY

7.1 We shall not provide any other guarantee with regard to the goods than that issued by our supplier. These guarantee conditions are to be issued to the Customer upon delivery of the goods or are available for perusal at our premises and shall be sent to the Customer on request.
7.2 If the supplier's guarantee conditions are judged by a court not to be binding, the present General Terms and Conditions of Landport shall exclusively apply.
7.3 Our guarantee obligation covers the replacement or repair of goods to the best of our ability during the guarantee period which exhibit manufacturing or material defects, in so far as we can recover the costs of replacement or repair from our supplier.
7.4 If the Customer wishes to appeal to our guarantee obligations, it shall act in accordance with our instructions as regards the making available to us of the faulty products.
7.5 This guarantee lapses in the event of defects to the goods which are the consequence of wear and tear, incompetent use, a lack of care, any damage inducing event which occurs after delivery or any change made by the Customer or third parties.
7.6 Our liability is explicitly limited to that referred to in the above sections of this article. We are not liable for any loss or damage, no matter on what account such has occurred, including all direct and indirect loss or damage, such as consequential loss or damage or trading loss. In the event of us being liable, this shall, at all times, be limited to the amount or amounts for which we are insured.

ANNULMENT

We are entitled to annul the agreement with immediate effect without having to issue a notice of default and without judicial intervention and without being liable for any compensation, if the Customer fails to fulfil any obligation arising from the agreement, or fails to do so on time, if the Customer is declared bankrupt, is granted a (provisional) suspension of payments, if its business is liquidated or if the Customer loses the disposal of its property. All our claims are to be immediately due and payable.

APPLICABLE LAW AND DISPUTES

Dutch law applies to all agreements which are subject to these terms and conditions. Unless the law imperatively designates a different court, all disputes shall be exclusively settled by the competent court in 's-Hertogenbosch.

Filed at the Chamber of Commerce and Industry under number 18050673 (2004).

LP
Landport Europe

EUROPE DYNAC BATTERIES

LANDPORT B.V.
RAMGATSEWEG 63 I 4941 VN RAAMSDONKSVEER - THE NETHERLANDS
PHONE: +31 (0) 162 58 14 00 I FAX: +31 (0) 162 58 14 01
E-MAIL: INFO@LANDPORTBV.COM I WWW.LANDPORTBV.COM

ACCU VIKS B.V.B.A.
FILLIERSDREEF 65 I B-9800 DEINZE - BELGIUM
PHONE: +32 (0)9 386 78 58 I FAX: +32 (0)9 386 58 16
E-MAIL: INFO@ACCUVIKS.BE I WWW.ACCUVIKS.BE